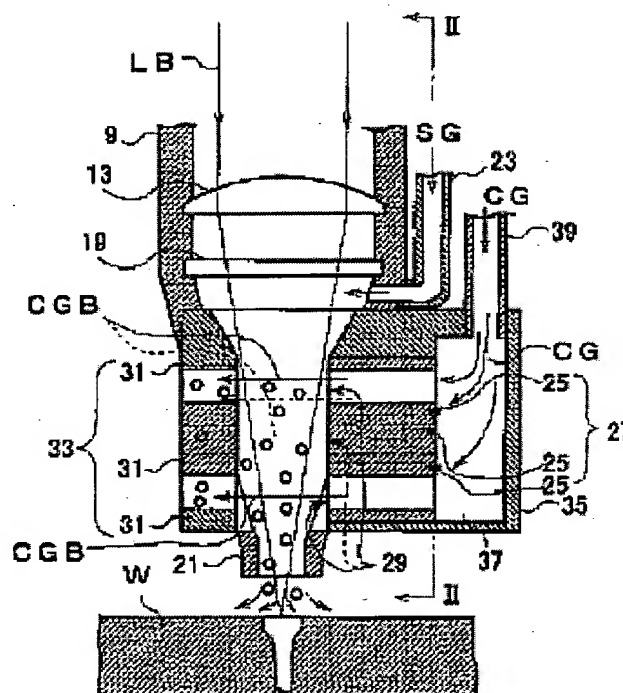


METHOD AND DEVICE FOR PREVENTING CONTAMINATION AND BREAKAGE OF OPTICAL SYSTEM MEMBER IN LASER PROCESSING MACHINE

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Abstract of JP11216589

PROBLEM TO BE SOLVED: To enlarge the generality by efficiently preventing the contamination and breakage of an optical system member with an inexpensive device.
SOLUTION: On a processing point side of a light condensing lens in a laser processing head 9, a cleaning gas CG is sprayed towards the other side from plural gas injection nozzles 25 constituting a segment nozzle 27 installed on one side. Plural discharging nozzle 31 are arranged on the other side at the position opposing to each of the plural gas injection nozzles 25, and each cleaning gas stream line CGB is discharged from each discharging nozzle 31. Therefore, the plural cleaning gas stream lines CGB being straightened are formed in the laser processing head 9. Since a spatter and the like generated at the time of laser processing are surely blocked by the plural cleaning gas stream lines CGB, the contamination and breakage of the optical system member such as a light condensing lens and the like are surely prevented. The air can be used as the cleaning gas CG resulting in a low cost.



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